

p#12

09673707

1600

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/673,707

DATE: 01/02/2003

TIME: 08:57:34

Input Set : A:\Nih356-1.app

Output Set: N:\CRF4\01022003\I673707.raw

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TECH CENTER 1600/2900

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3 <110> APPLICANT: Pastan, Ira H.
4   Bera, Tapan K.
5   Kennedy, Paul E.
6   Berger, Edward A.
7   Barbas III, Carlos F.
8   The Government of the United States of America
9   as represented by The Secretary of the
10  Department of Health and Human Services
12 <120> TITLE OF INVENTION: Recombinant Immunotoxin Directed Against the HIV-1
13   gp120 Envelope Glycoprotein
15 <130> FILE REFERENCE: 015280-356100US
17 <140> CURRENT APPLICATION NUMBER: US 09/673,707
18 <141> CURRENT FILING DATE: 2001-01-11
20 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/12909
21 <151> PRIOR FILING DATE: 1999-06-08
23 <150> PRIOR APPLICATION NUMBER: US 60/088,860
24 <151> PRIOR FILING DATE: 1998-06-11
26 <160> NUMBER OF SEQ ID NOS: 13
28 <170> SOFTWARE: PatentIn Ver. 2.0
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 251
32 <212> TYPE: PRT
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: Description of Artificial Sequence:3B3(Fv) amino
37   acid sequence
39 <400> SEQUENCE: 1
40 Met Gln Val Gln Leu Glu Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
41   1           5           10           15
43 Ala Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Arg Phe Ser Asn
44   20           25           30
46 Phe Thr Val His Trp Val Arg Gln Ala Pro Gly Gln Arg Phe Glu Trp
47   35           40           45
49 Met Gly Trp Ile Asn Pro Tyr Asn Gly Asn Lys Glu Phe Ser Ala Lys
50   50           55           60
52 Phe Gln Asp Arg Val Thr Phe Thr Ala Asp Thr Ser Ala Asn Thr Ala
53   65           70           75           80
55 Tyr Met Glu Leu Arg Ser Leu Arg Ser Ala Asp Thr Ala Val Tyr Tyr
56   85           90           95
58 Cys Ala Arg Val Gly Glu Trp Gly Trp Asp Asp Ser Pro Gln Asp Asn
59   100          105          110
61 Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr Thr Val Ile Val Ser Ser
62   115          120          125

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64 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
65      130                135                140
67 Ile Glu Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu
68 145                150                155                160
70 Arg Ala Thr Phe Ser Cys Arg Ser Ser His Ser Ile Arg Ser Arg Arg
71                165                170                175
73 Val Ala Trp Tyr Gln His Lys Pro Gly Gln Ala Pro Arg Leu Val Ile
74                180                185                190
76 His Gly Val Ser Asn Arg Ala Ser Gly Ile Ser Asp Arg Phe Ser Gly
77                195                200                205
79 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Thr Arg Val Glu Pro
80                210                215                220
82 Glu Asp Phe Ala Leu Tyr Tyr Cys Gln Val Tyr Gly Ala Ser Ser Tyr
83 225                230                235                240
85 Thr Phe Gly Gln Gly Thr Lys Leu Glu Arg Lys
86                245                250

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89 <210> SEQ ID NO: 2

90 <211> LENGTH: 753

91 <212> TYPE: DNA

92 <213> ORGANISM: Artificial Sequence

94 <220> FEATURE:

95 <223> OTHER INFORMATION: Description of Artificial

96 Sequence:3B3V-H(Gly-4Ser)-3V-L nucleotide sequence

98 <220> FEATURE:

99 <221> NAME/KEY: CDS

100 <222> LOCATION: (1)..(753)

102 <400> SEQUENCE: 2

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103 atgcaggttc agctcgagca gtctggggct gaggtgaaga agcctggggc ctcaagtgaag 60
104 gtttcttgctc aggcttctgg atacagattc agtaacttca cgggccactg ggtgcgccag 120
105 gcccccgac agaggtttga gtggatggga tggatcaatc cttacaacgg aaacaaagaa 180
106 ttttcagcga agttccagga cagagtcacc tttaccgagg acacatccgc gaacacagcc 240
107 tacatggagt tgaggagcct cagatctgca gacacggctg tttattattg tgcgagagt 300
108 ggggagtggt gttgggatga ttctccccag gacaattatt atatggacgt ctggggcaaa 360
109 gggaccacgg tcatcgcttc ctcaggcgga ggcggatcag gtggtggcgg atctggaggt 420
110 ggcggaagcg acatcgagct cagcagctc ccaggcacc tgtctctgtc tccaggggaa 480
111 agagccacct tctcctgtag gtccagtcac agcattcgca gccgccgct agcctggtac 540
112 cagcaciaaac ctggccaggc tccaaggctg gtcatacatg gtgtttccaa tagggcctct 600
113 ggcattctcag acaggttcag cggcagtggt tctgggacag acttcactct caccatcacc 660
114 agagtggagc ctgaagactt tgcactgtac tactgtcagg tctatggtgc ctctcgtac 720
115 acttttggcc aggggaccaa actggagagg aaa 753

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117 <210> SEQ ID NO: 3

118 <211> LENGTH: 15

119 <212> TYPE: PRT

120 <213> ORGANISM: Artificial Sequence

122 <220> FEATURE:

123 <223> OTHER INFORMATION: Description of Artificial Sequence:linker

125 <400> SEQUENCE: 3

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126 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
127      1                5                10                15

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130 <210> SEQ ID NO: 4
131 <211> LENGTH: 8
132 <212> TYPE: PRT
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Description of Artificial Sequence:C3 connector
137     peptide
139 <400> SEQUENCE: 4
140 Ser Gly Gly Pro Glu Gly Gly Ser
141   1           5
144 <210> SEQ ID NO: 5
145 <211> LENGTH: 81
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Description of Artificial Sequence:T128 primer
152 <400> SEQUENCE: 5
153 aaacatatgc aggttcagct cgagcagctct ggggctgagg tgaagaagcc tggggcctca 60
154 gtgaagggttt cttgtcaggc t                               81
156 <210> SEQ ID NO: 6
157 <211> LENGTH: 72
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Description of Artificial Sequence:T129 primer
164 <400> SEQUENCE: 6
165 tccagatccg ccaccacctg atccgcctcc gcctgaggag acgatgaccg tgggtcccttt 60
166 gccccagacg tc                               72
168 <210> SEQ ID NO: 7
169 <211> LENGTH: 78
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence:T-144 primer
176 <400> SEQUENCE: 7
177 tcaggtggtg gcggatctgg aggtggcgga agcgacatcg agctcacgca gtctccaggc 60
178 accctgtctc tgtctcca                               78
180 <210> SEQ ID NO: 8
181 <211> LENGTH: 57
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Description of Artificial Sequence:T131 primer
188 <400> SEQUENCE: 8
189 ggaagctttc ctctccagtt tgggtcccctg gccaaaagtg tacgaggagg caccata 57
191 <210> SEQ ID NO: 9
192 <211> LENGTH: 4
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence

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196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxy
198     terminal sequence of Pseudomonas exotoxin (PE)
199     endoplasmic retention sequence
201 <400> SEQUENCE: 9
202 Lys Asp Glu Leu
203     1
206 <210> SEQ ID NO: 10
207 <211> LENGTH: 4
208 <212> TYPE: PRT
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxy
213     terminal sequence of Pseudomonas exotoxin (PE)
214     endoplasmic retention sequence
216 <400> SEQUENCE: 10
217 Arg Glu Asp Leu
218     1
221 <210> SEQ ID NO: 11
222 <211> LENGTH: 5
223 <212> TYPE: PRT
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Description of Artificial Sequence:native carboxy
228     terminal sequence of Pseudomonas exotoxin (PE)
229     endoplasmic retention sequence
231 <400> SEQUENCE: 11
232 Arg Glu Asp Leu Lys
233     1             5
236 <210> SEQ ID NO: 12
237 <211> LENGTH: 5
238 <212> TYPE: PRT
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Description of Artificial Sequence:linking peptide
244 <400> SEQUENCE: 12
245 Gly Gly Gly Gly Ser
246     1             5
249 <210> SEQ ID NO: 13
250 <211> LENGTH: 4
251 <212> TYPE: PRT
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxy
256     terminal sequence of Pseudomonas exotoxin (PE)
257     endoplasmic retention sequence
259 <400> SEQUENCE: 13
260 Arg Asp Glu Leu
261     1

```

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